# **REMARKS**

In response to the Office Action mailed June 1, 2005, the Applicants respectfully request reconsideration. Claims 1-101 were previously pending in this application. Claims 1, 4, 5, 14, 22, 25, 26, 32-34, 38, 41, 42, 51, 59, 62, 63, 69, 71, 72, 76, 77, 79, 84, 89, 90, 92 and 97 have been amended. No claims have been cancelled. As a result claims 1-101 are pending for examination with claims 1, 22, 32, 38, 59, 69, 76 and 89 being independent claims. No new matter has been added. Applicants note the Examiner's withdrawal of the restriction requirement and thank the Examiner for reconsideration of the requirement.

## Claim Objections

In sections 2-6 of the Office Action, the Examiner objected to claims 1-21, 34, 38-58, 72 and 77 for informalities. Applicants have amended claims 1, 34, 38, 51, 72 generally as suggested by the Examiner and request reconsideration of the amended claims and claims dependent therefrom.

### Rejections Under 35 U.S.C. §102(b)

In section 8 of the Office Action, the Examiner rejected claims 1-3, 11-13, 18, 20-23, 28, 30-32, 38-40, 48-50, 55, 57-60, 65, 67-70, 74, 76-77, 89 and 90 under 35 U.S.C. §102(b) as being anticipated by Recknagel et al. (U.S. Patent 6,031,343; referred to hereafter as "Recknagel"). Applicants traverse the rejection and, in light of the amendments to the independent claims, respectfully suggest that the rejections are moot.

#### Rejections Under 35 U.S.C. §103(a)

In sections 9-19 of the Office Action, the Examiner rejected claims 6-10, 43-47, 73, 83-88 and 96-101 under 35 U.S.C. §103(a) as being unpatentable over Recknagel in view of Speirs et al. (U.S. Patent 5,677,603; referred to hereafter as "Speirs"); rejected claims 14, 17, 24, 27, 51, 54, 61 and 64 under 35 U.S.C. §103(a) as being unpatentable over Recknagel in view of Fleischmann (U.S. Patent 6,203,180; referred to hereafter as "Fleischmann"); rejected claims 15, 16, 25, 26, 52, 53, 62 and 63 under 35 U.S.C.

§103(a) as being unpatentable over Recknagel in view of Fleischmann and further in view of Rahm et al. (U.S. Patent 6,636,003; referred to hereafter as "Rahm"); rejected claims 4, 5, 41 and 42 under 35 U.S.C. §103(a) as being unpatentable over Recknagel in view of Shintani (U.S. Patent 5,646,608; referred to hereafter as "Shintani"); rejected claims 19, 29, 56 and 66 under 35 U.S.C. §103(a) as being unpatentable over Recknagel in view of (JP 2002134284; referred to hereafter as "Shoji"); rejected claims 33-36, 71, 72, 78-81 and 91-94 under 35 U.S.C. §103(a) as being unpatentable over Recknagel in view of Mitchell (U.S. Patent 6,614,126; referred to hereafter as "Mitchell"); rejected claim 37 under 35 U.S.C. §103(a) as being unpatentable over Recknagel (U.S. Patent 4,367,470; referred to hereafter as "Tadokoro"); rejected claim 75 under 35 U.S.C. §103(a) as being unpatentable over Recknagel in view of Tadokoro; and rejected claims 82 and 95 under 35 U.S.C. §103(a) as being unpatentable over Recknagel in view of Mitchell and further in view of Lys et al. (U.S. Patent 6,211,626; referred to hereafter as "Lys"). Applicants disagree and traverse the rejections.

Applicants' independent claim 1, as amended, recites a method of illuminating an environment, comprising, among other things, providing a connector between a control system and a plurality of lights to provide a two-way data interface between the lights and the control system. Applicants' independent claim 38, as amended recites a system for illuminating an environment, comprising among other things, a connector between the control system and a plurality of lights to provide a two-way data interface between the lights and the control system. The Examiner notes that Recknagel does not disclose a two-way data interface. Applicants agree. However, Applicants disagree with the Examiner's contention that Shintani discloses a two-way data interface at Fig. 4.

Shintani discloses electronic devices that have light emitters and a light detectors. The light emitters provide for one-way communication to a remote control unit and the light detectors provide for one-way communication from the remote control unit to the devices. As disclosed in Shintani and shown in Figs. 1, 2, 4 and 5 thereof, the light emitters and light detectors are separate components of the various devices. For example,

Fig. 1 shows devices 11-16 with light detectors 11R-16R and separate light emitters 11E-16E. In fact, air-conditioning unit 17 has only a light detector 17R and no light emitter.

Applicants suggest that one of skill in the art would not consider the emitters and detectors disclosed in Shintani to be connectors, and would certainly not consider combining them with the address modules (120) shown in Recknagel, which communicates to the central controller via a data cable (115). The infrared emitters and detectors in Shintani are incompatible with the data cable in Recknagel. Even accepting the Examiner's characterization of the Shintani emitters and detectors as connectors, Shintani fails to disclose a single connector that provides a two-way data interface. Each of the separate emitters and detectors disclosed in Shintani provides for only a one-way communication with the remote control unit.

Applicants respectfully submit that claims 1 and 38 as amended are patentable over the combination of Recknagel and Shintani because the obviousness criteria specified in MPEP §2143 are not met. First, as described in the above remarks, the Recknagel and Shintani connectors are not analogous art and there is no motivation to combine the references. Second, since Recknagel and Shintani are not analogous art, there can be no reasonable expectation of success in combining the references. Thirdly, Recknagel and Shintani, alone or in any combination, fail to teach or suggest <u>all</u> of the features recited in each of the Applicants' claims 1 and 38. At the least, Recknagel and Shintani fail to teach or suggest a connector providing a "two-way data interface between ... lights and [a] control system".

Claims 2-21 and 39-58 depend directly or indirectly on claims 1 and 38, respectively and are thus allowable at least by dependency. Accordingly, Applicants traverse the rejections of the dependent claims 2-21 and 39-58 and respectfully request withdrawal of the rejections of claims 2-21 and 39-58. Additionally, independent claims 76 and 89, as amended, contain similar limitations to those in independent claims 1 and 38. Thus, Applicants respectfully submit that claims 76 and 89 are also patentable at least for the reasons provided above with respect to claims 1 and 38. Claims 77-88 and

90-101 depend directly or indirectly on claims 76 and 89, respectively and are thus allowable at least by dependency. Accordingly, Applicants traverse the rejections of the dependent claims 77-88 and 90-101 and respectfully request withdrawal of the rejections of claims 77-88 and 90-101.

Applicants' independent claim 22, as amended, recites a method of illuminating an environment, wherein, at least in part, a color temperature of at least some white light is modified by mixing light from a white source of light of a different color temperature. Applicants independent claim 59, as amended, recites a system for illuminating an environment, wherein, at least in part, a color temperature of at least some white light is modified by mixing light from a white source of light of a different color temperature. The Examiner notes that Recknagel and Fleischmann do not disclose modifying the color temperature of white light by mixing light from a second light source and contends that Rahm discloses modifying the color temperature of white light by mixing light from a second light source. However, Applicants note that Rahm does not disclose that the second light source is a white source of light of a different color temperature.

Rahm discloses an LED arrangement that produces a color temperature adjustable white light. As disclosed in Rahm, the LED arrangement includes white LEDs that output white light at a desired intensity. In addition, the arrangement includes one or more colored LEDs arranged such that a light output from the colored LEDs combines with the white light to produce a resultant light having a desired color temperature. It is the intensity of the colored LEDs that is adjustable to provide the desired color temperature. As noted by Rahm, the "drive current to the white LEDs 130 is held at a constant level and the drive current to the [colored] LEDs is adjusted until the desired color temperature is reached" (col. 4, lines 14-17). Nowhere does Rahm disclose modifying a color temperature of a white light by mixing light from a white source of light of a different color temperature. Rahm solely discloses mixing white light with colored light to obtain light having a desired color temperature.

Since neither Recknagel nor Rahm, alone or in any combination, teach or suggest all of the features recited in each of the Applicants' claims 22 and 59, Applicants respectfully submit that claims 22 and 59 as amended are patentable over the combination of Recknagel and Rahm. Claims 23-31 and 60-68 depend directly or indirectly on claims 22 and 59, respectively and are thus allowable at least by dependency. Accordingly, Applicants traverse the rejections of the dependent claims 23-31 and 60-68 and respectfully request withdrawal of the rejections of claims 23-31 and 60-68. Additionally, independent claims 76 and 89, as amended, contain similar limitations to those in independent claims 23 and 59. Thus, Applicants respectfully submit that claims 76 and 89 are also patentable at least for the reasons provided above with respect to claims 23 and 59. Claims 77-88 and 90-101 depend directly or indirectly on claims 76 and 89, respectively and are thus allowable at least by dependency. Accordingly, Applicants traverse the rejections of the dependent claims 77-88 and 90-101 and respectfully request withdrawal of the rejections of claims 77-88 and 90-101.

Applicants independent claim 32, as amended, recites a method of lighting an aircraft environment, comprising, at least in part, configuring the control system to respond to signals from at least one other system of the aircraft and to generate lighting control signals in response to the signals from the at least one other system. Applicants independent claim 69, as amended, recites a system of lighting an aircraft environment, comprising, at least in part, a control system configured to respond to signals from at least one other system of the aircraft and to generate lighting control signals in response to the signals from the at least one other system. The Examiner notes that Recknagel does not disclose the control system having an interface to another system of the aircraft and contends that Mitchell discloses the control system having an interface to another system of the aircraft. However, Applicants note that Mitchell does not disclose that the control system generates lighting control signals in response to the other system.

Mitchell discloses a data communication apparatus including multiple white light emitting diodes, a data transmitting device positioned adjacent the white light emitting

diodes, which is configured to wirelessly transmit data signals to electronic devices used by the user and a data receiving device for receiving wirelessly transmitted data signals from the electronic devices used by the user. As disclosed in Mitchell, the data communication apparatus co-locates a lighting system with an overhead wireless system. Although co-located, Mitchell does not disclose that the lighting system responds to signals from another system of the aircraft to generate lighting control signals. While Mitchell discloses the use of a single remote control (330) for controlling lighting, delivery of In-Flight Entertainment (IFE) data content and other information, these other systems of the aircraft, i.e., the IFE system, data communications system, etc., do not provide signals to the lighting system to control the lighting.

Since neither Recknagel nor Mitchell, alone or in any combination, teach or suggest <u>all</u> of the features recited in each of the Applicants' claims 32 and 69, Applicants respectfully submit that claims 32 and 69 as amended are patentable over the combination of Recknagel and Mitchell. Claims 33-37 and 70-75 depend directly or indirectly on claims 32 and 69, respectively and are thus allowable at least by dependency. Accordingly, Applicants traverse the rejections of the dependent claims 33-37 and 70-75 and respectfully request withdrawal of the rejections of claims 33-37 and 70-75.

# **CONCLUSION**

In view of the foregoing amendments and remarks, reconsideration is respectfully requested. This application should now be in condition for allowance; a notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the telephone number listed below.

Respectfully submitted,

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